REMARKS/ARGUMENTS

Claims 1-8, 10-33, 35-48, 50, 51 and 53-55 are pending in the application. The Examiner has rejected claims 1-8, 10-33, 35-48, 50, 51 and 53-54. The Examiner has objected to claim 55. Applicant respectfully requests reconsideration of pending claims 1-8, 10-33, 35-48, 50, 51 and 53-55.

The Examiner has objected to claims 36 and 55 because of informalities. Applicant has amended claim 36 to depend from claim 31, which is a pending claim. Applicant has amended claim 55 to clarify antecedent basis. Applicant submits the amendments do not change the scopes of the claims, do not introduce new matter, and are merely cosmetic. Thus, Applicant submits claims 36 and 55 are in condition for allowance.

The Examiner has rejected claims 1-8, 10-33, 35-48, 50, 51 and 53 under 35 U.S.C. § 101, alleging the claimed invention is directed to non-statutory subject matter. Applicant respectfully disagrees.

Regarding claims 1-8, 10-33, 35, and 36, the Examiner states, "The test for a method claim is whether the claimed method is (1) tied to a particular machine or apparatus, *or* (2) transforms a particular article to a different state or thing. This is called the 'machine-or-transformation test.' See *In re Bilski*, 545 F.3d 943, 88 USPQ2d 1385 (Fed. Cir. 2008)." As one example, Applicant notes claim 1 recites, in part, "implementing a protection switching operation for switching designated information from the failure predicted one of said protected system elements to a protection system element." Applicant submits such feature of claim 1 transforms a protection system element to a different state. As paragraph [0013] of the specification states, "Accordingly, the protection system element is ready and able to be brought in-service immediately upon a protection switch being deemed necessary, thereby minimizing or eliminating service disruptions resulting from performing protection switching." Thus, as the protection system element is transformed to its in-service state, Applicant submits the "machine-or-transformation test" is satisfied. Therefore, Applicant submits claims 1-8, 10-33, 35, and 36 recite patentable subject matter and are in condition for allowance.

Regarding claims 37-44, the Examiner states, "The test for a method claim is whether the claimed method is (1) tied to a particular machine or apparatus, *or* (2) transforms a particular article to a different state or thing. This is called the 'machine-or-transformation test.' See *In re Bilski*, 545 F.3d 943, 88 USPQ2d 1385 (Fed. Cir. 2008)." As one example, Applicant notes claim 37 recites, in part,

"downloading service information of the failure predicted one of said protected system elements to the protection system element after identifying the failure predicted one of said protected system elements, wherein downloading said service information is performed after determining that the protection switching priority applies to the failure predicted one of said protected system elements." Applicant submits such feature of claim 37 transforms a protection system element to one to which service information for the failure predicted one of said protected system elements has been downloaded. Thus, as the protection system element is transformed to one "associated specifically with a particular protected card" (see paragraph [0048], for example), Applicant submits the "machine-or-transformation test" is satisfied.

As another example, Applicant submits claim 37 recites, in part, "switching communication service supported by the failure predicted one of said protected system elements for being supported by to the protection system element after confirming said failure." Applicant submits such feature of claim 37 transforms a protection system element to a different state. As paragraph [0013] of the specification states, "Accordingly, the protection system element is ready and able to be brought in-service immediately upon a protection switch being deemed necessary, thereby minimizing or eliminating service disruptions resulting from performing protection switching." Thus, as the protection system element is transformed to its in-service state, Applicant submits the "machine-or-transformation test" is satisfied. Therefore, Applicant submits claims 37-44 recite patentable subject matter and are in condition for allowance.

Regarding claims 45-48, 50, 51, and 53, the Examiner states, "The test for a method claim is whether the claimed method is (1) tied to a particular machine or apparatus, *or* (2) transforms a particular article to a different state or thing. This is called the 'machine-or-transformation test.' See *In re Bilski*, 545 F.3d 943, 88 USPQ2d 1385 (Fed. Cir. 2008)." As one example, Applicant notes claim 45 recites, in part, "facilitating a failure confirmed protection switching operation in response to identifying that the failure prediction condition for one of said protected has been met during operation of said protected system elements." Applicant submits such feature of claim 45 transforms a protection system element to a different state. As paragraph [0013] of the specification states, "Accordingly, the protection system element is ready and able to be brought in-service immediately upon a protection switch being deemed necessary, thereby minimizing or eliminating service disruptions resulting from performing protection switching." Thus, as the protection system element is transformed to its in-service state, Applicant submits the "machine-or-transformation test" is satisfied.

As another example, Applicant notes claim 45 recites, in part, "facilitating an administrator-initiated protection switching operation in response to receiving an administrator-issued protection switching initiation notification." Applicant submits such feature of claim 45 transforms a protection system element to a different state. As paragraph [0013] of the specification states, "Accordingly, the protection system element is ready and able to be brought in-service immediately upon a protection switch being deemed necessary, thereby minimizing or eliminating service disruptions resulting from performing protection switching." Thus, as the protection system element is transformed to its in-service state, Applicant submits the "machine-or-transformation test" is satisfied. Therefore, Applicant submits claims 45-48, 50, 51, and 53 recite patentable subject matter and are in condition for allowance.

The Examiner has rejected claims 1-8, 10-33, 35 and 36 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicant respectfully disagrees. The Examiner cites paragraph [0018] and states, "As such, identification of the failure is not based on protection switching priority. Rather, protection switching priority is determined after identification of the failure." However, Applicant notes paragraph [0019] recites, in part, "The protection switching priority designates which one of a plurality of failure predicted cards (i.e., the designated failure predicted card) will be subjected next to a protection switching operation." Thus, Applicant submits the subject matter of claim 1 is consistent with the specification. Therefore, Applicant submits claims 1-8, 10-33, 35, and 36 comply with the written description requirement and are in condition for allowance.

The Examiner has rejected claims 37, 42, 44-48, 50 and 51 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,978,398 of Harper '398 in view of U.S. Patent No. 4,245,342 of Entenman.

Regarding claim 37, Applicant submits the cited portions of the cited references fail to render unpatentable the subject matter of claim 37. For example, Applicant submits the teaching of column 6, lines 38-42, of the Entenman reference fails to disclose or render obvious "determining that a protection switching priority among a collection of failure predicted system elements applies to the failure predicted one of said protected system elements." As an example, Applicant submits the cited portion of the cited reference does not disclose or render obvious "a collection of failure predicted system elements" or "the failure predicted one of said protected system elements."

As another example, Applicant submits the teaching of column 2, lines 23-26, of the Harper et al. '398 reference does not disclose or render obvious "wherein downloading said service information is performed after determining that the protection switching priority applies to the failure predicted one of said protected system elements." Moreover, Applicant submits the teaching of column 6, lines 38-42, of the Entenman reference does not disclose or render obvious "wherein downloading said service information is performed after determining that the protection switching priority applies to the failure predicted one of said protected system elements." Thus, Applicant submits even an attempted combination of the teachings of the cited references would not render such feature obvious. Applicant notes the Examiner offers no explanation as to why such alleged combination would supposedly render such feature obvious, but merely states, "It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings...." The Examiner alleges as motivation to combine the teachings that "Harper is concerned with degradation of performance (see column 1 lines 60-61). However, Applicant notes column 1, lines 60-61, of the Harper et al. '398 reference states "method and structure in which outage times of computer systems can be proactively reduced." Furthermore, the Examiner states, "as per teachings of Entenman (see column 6 line 38-42), constitutes as suitable known means for overcoming performance degradation by enabling recovery to the highest priority device." However, as Applicant sees no teaching in the cited portions of the Entenman reference of proactively reducing outage times of computer systems," Applicant submits the cited teachings of the Entenman reference do not constitute a suitable known means for proactively reducing outage times of computer systems, so Applicant submits the Examiner's alleged motivation to combine and even other variations of it are inapplicable to the teachings of the cited prior art references. Therefore, Applicant submits claim 37 is in condition for allowance.

Regarding claim 42, Applicant submits the cited portion of the Harper et al. '398 reference teaches away from the subject matter of claim 42. For example, Applicant notes column 9, lines 16-17, state "...prior to said degradation in performance...," while Applicant notes claim 42 states, "...determining that the failure prediction parameter corresponding to a service agreement parameter for one of said protected system elements has declined...." Thus, Applicant submits the alleged teachings of the cited references cannot be combined to render obvious the subject matter of claim 42. Therefore, Applicant submits claim 42 is in condition for allowance.

Regarding claim 44, Applicant notes the Examiner states "In regards to claim 44, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above." However,

Applicant notes the Examiner does not base the rejections of claims 37, 42, 44-48, 50, and 51 on the Downes reference, and the Examiner does not appear to cite any portion of the Downes reference with respect to such rejections. While the Examiner cites "(see column 2 lines 23-26)," of the Harper et al. '398 reference, Applicant submits "...wherein there is other than a one-to-one relationship between the another node and the primary node" does not disclose or suggest "...wherein the protection system element provides switching functionality exclusively for all of said protected system elements." Therefore, Applicant submits claim 44 is in condition for allowance.

Regarding claim 45, Applicant submits the cited portions of the cited references fail to render unpatentable the subject matter of claim 45. As an example, Applicant submits the cited portions of the cited references fail to render obvious "facilitating a failure confirmed protection switching operation in response to identifying that the failure prediction condition for one of said protected has been met during operation of said protected system elements." While the Examiner cites "(see column 6 lines 18-25)" of the Harper et al. '398 reference , Applicant notes the Examiner cited "(see column 2 lines 23-26)" with respect to "...wherein a failure prediction condition for at least a portion of a plurality of protected system elements is defined," and Applicant submits the teachings of column 6, lines 18-25, do not disclose or render obvious, for example, "...in response to identifying that the failure prediction condition for one of said protected has been met during operation of said protected system elements." Also, while the Examiner cites "(see column 4 lines 20-22 of incorporated by reference Harper '266)" as allegedly disclosing "facilitating an administrator-initiated protection switching operation in response to receiving an administrator-issued protection switching initiation notification," Applicant submits no teaching as to, for example, "...in response to receiving an administrator-issued protection switching initiation notification" is found in the cited portion. Also, as Applicant submitted with respect to claim 37 above, Applicant submits the Examiner's statement, "(as per teachings of Entenman (see column 6 lines 38-42), constitutes as suitable known means for overcoming performance degradation by enabling recovery to the highest priority device" mischaracterizes the subject matter of the cited portion of the cited reference. Thus, Applicant submits the Examiner's alleged motivation to combine is flawed. Therefore, Applicant submits claim 45 is in condition for allowance.

Regarding claim 46, Applicant submits the cited portions fail to render unpatentable the subject matter of claim 46. For example, while the Examiner cites "(see column 9 lines 7-14 of incorporated by reference Harper' 266)," Applicant submits neither the "single parameter measurement" nor the

"multiparameter measurement" of such portion appears to disclose or suggest "...for each of said protected system elements." Therefore, Applicant submits claim 46 is in condition for allowance.

Regarding claim 47, Applicant submits the cited portion of the cited reference fails to render unpatentable the subject matter of claim 47. As an example, while the Examiner cites "(see column 9 lines 6-10 of incorporated by reference Harper '266)," Applicant submits the cited portion fails to disclose or suggest "...specifying a first type of failure prediction criterion for a first portion of said protected system elements and a second type of failure prediction criterion for a second portion of said protected system elements." Therefore, Applicant submits claim 47 is in condition for allowance.

Regarding claim 48, Applicant submits the cited portions of the cited reference fails to disclose the subject matter of claim 48. As an example, while the Examiner cites "(see column 4 lines 10-15 and column 6 lines 32-37)," Applicant submits neither of such portions discloses or renders obvious "...specifying said failure prediction criterion on a per protected system element basis." Therefore, Applicant submits claim 48 is in condition for allowance.

Regarding claim 50, Applicant submits the cited portions fail to disclose or render obvious the subject matter of claim 50. As an example, while the Examiner cites "(see column 2 lines 23-26)" as allegedly disclosing "downloading service information of the failure predicted one of said protected system elements to the protection system element after identifying the failure predicted one of said protected system elements," Applicant submits "...wherein there is other than a one-to-one relationship between the another node and the primary node" does not teach or suggest "downloading service information of the failure predicted one of said protected system elements to the protection system element...." Therefore, Applicant submits claim 50 is in condition for allowance.

Regarding claim 51, Applicant submits the cited portion of the cited reference fails to disclose the subject matter of claim 51. As an example, while the Examiner cites "(see column 6 lines 38-42)" of the Entenman reference, Applicant notes that portion merely states, "In the arrangement of FIG. 2 microprocessor controlled apparatus is employed; and may allot the spare modem among the modules 10 in accordance with any desired priority algorithm (fixed or changing)." Applicant submits such teaching fails to disclose, for example, "...applies to the failure predicted one of said protected system elements prior to downloading said service information." Moreover, Applicant submits Entenman's teachings as to, for example, "...it is an object of the present invention to provide improved modem control apparatus which automatically operatively substitutes a redundant spare modem for any failed

one of n active units..." of column 1, lines 11-14, teaches away from, for example, "...failure predicted system elements..." and "...the failure predicted one of said protected system elements...." Also, Applicant submits the cited portion fails to disclose or render obvious, for example, "...prior to downloading said service information." Therefore, Applicant submits claim 51 is in condition for allowance.

The Examiner has rejected claims 1-3, 5, 6, 10, 12-23, 27, 29-33, 35, 36, 38, 40, 41 and 43 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,978,398 of Harper '398 in view of U.S. Patent No. 4,245,342 of Entenman and US Patent No. 4,769,761 of Downes et al.

Regarding claim 1, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 1. As an example, Applicant submits the cited portions of the cited references fail to disclose or suggest "wherein identifying the failure predicted one of said protected system elements includes assessing performance of said protected system elements based at least partially on an element demerit point level of each one of said protected system elements." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference, Applicant notes such portion merely recites "U.S. Pat. No. 4,339,657 describes a technique for error logging by integrating error counts over a selected number of operations and comparing the results with a criterion. An exception is logged if the number of errors exceeds the criterion, but the exception log is cleared if the number of errors is less than the criterion." Applicant submits the cited portions of the cited reference fail to teach or suggest applying the "technique for error logging" mentioned in the Downes reference to "...each one of said protected system elements." Moreover, Applicant submits the cited portion of the cited reference appears to teach away from such modification, as Applicant submits the "technique for error logging" appears to discard its "exception log" when "the exception log is cleared." Furthermore, Applicant submits the Examiner's assertion that "Downes discloses the concept of predicting a failure..." is unsupported by the cited portion of the cited reference, as Applicant sees no disclosure of such "concept," and, moreover, claim 1 is not directed to a "concept."

Also, while the Examiner cites "(see column 6 lines 38-42)" of the Entenman reference as allegedly disclosing "in case of multiple failures, allotting a spare device among the devices in accordance with a priority algorithm," Applicant submits column 6, lines 35-38, refer to "the FIG. 1 arrangement" and refer to "a logic circuit 18 hierarchy," while column 6, lines 38-42, refers to "the arrangement of FIG. 2," "microprocessor controlled apparatus," "the spare modem," and "modules 10,"

and does not mention "in case of multiple failures." Thus, Applicant submits the Examiner alleges supposed teachings not found in the cited portion of the Entenman reference.

As another example, Applicant submits the cited portions of the cited references fail to disclose or suggest "identifying a failure predicted one of a plurality of protected system elements." While the Examiner cites "(see column 2 lines 19-23)" and "(see column 4 lines 23-27)," Applicant submits such portions merely recite "...monitoring the primary node of the computer system..." and "...determining whether the primary node is failing or about to fail...," not "...a plurality of protected system elements." Therefore, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to the subject matter of claim 1. Thus, Applicant submits claim 1 is in condition for allowance.

Regarding Claim 2, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 2. As an example, Applicant submits the cited portions of the cited references fail to disclose or suggest "wherein identifying the failure predicted one of said protected system elements includes assessing at least one of a plurality of failure prediction parameters of said protected system elements for determining when a failure prediction condition has been met by one of said protected system elements." While the Examiner cites "(see column 9 lines 15-20 of incorporated by reference Harper '266)," Applicant notes such portions merely recites "In single parameter monitoring, a rejuvenation agent monitors a small set of parameters and triggers rejuvenation when one or more of them approaches a predefined resource exhaustion threshold or characteristic hazardous value. This is effective for scenarios where a small number of primary indicators are found which reliably indicate resource exhaustion." Applicant submits such "monitoring" does not disclose or suggest "...identifying the failure predicted one of said protected system elements...," as Applicant sees no teaching or suggestion as to "...said protected system elements." Thus, Applicant submits claim 2 is in condition for allowance.

Regarding Claim 3, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 3. As an example, Applicant submits the cited portions of the cited references fail to disclose or suggest "correlating a present state of the failure prediction parameter to a failure prediction criterion for determining whether the failure prediction parameter has met a failure prediction condition." While the Examiner cites "(see column 9 lines 15-20 of incorporated by reference Harper '266)," Applicant submits the cited portion of the cited reference fails to disclose or

suggest "...determining whether the failure prediction parameter has met a failure prediction condition," as Applicant sees no teaching or suggestion as to "...failure prediction condition" or even "...has met...." Thus, Applicant submits claim 3 is in condition for allowance.

Regarding Claim 5, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 5. As one example, Applicant submits the cited portions of the cited references fail to disclose or suggest "wherein the monitoring the failure prediction parameter further comprises bridging the protection system element across the at least one of the plurality of the protected system elements." While the Examiner cites "(see column 6 lines 13-17)," Applicant submits such portion of the cited reference recites "...dynamic system updates...," which Applicant submits does not teach or suggest "...the monitoring the failure prediction parameter further comprising...." Thus, Applicant submits claim 5 is in condition for allowance.

Regarding Claim 6, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 6. As one example, Applicant submits the cited portions of the cited references fail to disclose or suggest "...wherein the monitoring the failure prediction parameter further comprises sequentially bridging the protection system element across each of the plurality of the protected system elements." While the Examiner cites "(see column 4 lines 23-27 and column 6 lines 13-17)," Applicant submits the cited portions of the cited reference do not disclose or suggest, for example, "...sequentially bridging..." or "...across each of the plurality of protected system elements." Thus, Applicant submits claim 6 is in condition for allowance.

Regarding Claim 10, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 10. Applicant has presented arguments for the allowability of claim 1, from which claim 10 depends. Thus, Applicant submits claim 10 is in condition for allowance.

Regarding Claim 12, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 12. As an example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein the element demerit point level corresponds to a quantity of element demerit points accumulated over a designated period of time." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference, Applicant submits the cited portion of the cited reference fails to disclose or suggest, for example, "...over a designated period of time." Thus, Applicant submits claim 12 is in condition for allowance.

Regarding Claim 13, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 13. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein identifying the failure predicted one of said protected system elements includes determining that a rate of change of element demerit points for one of said protected system elements has exceeded a predetermined element demerit point rate of change threshold limit." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference, Applicant submits the cited portion of the cited reference teaches away from the subject matter of claim 13. While claim 13 recites "...a rate of change of element demerit points...," Applicant notes the cited portion of the cited reference recites "...integrating error counts...." Thus, Applicant submits claim 13 is in condition for allowance.

Regarding Claim 14, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 14. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein identifying the failure predicted one of said protected system elements includes determining that a failure prediction parameter corresponding to a service agreement parameter for one of said protected system elements has declined to a predetermined minimal acceptable service agreement parameter level." While the Examiner cites "(see column 9 lines 10-15 and column 10 lines 12-15 of incorporated by reference Harper '266)," Applicant notes "column 10 lines 12-15" of the Harper '266 reference describe "paging traffic quiesces and CPU utilization falls to zero," neither of which Applicant considers to disclose "...a failure prediction parameter corresponding to a service agreement parameter for one of said protected system elements has declined to a predetermined minimal acceptable service agreement parameter level." Thus, Applicant submits claim 14 is in condition for allowance.

Regarding claim 15, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 15. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "determining that a protection switching priority among a collection of failure predicted system elements applies to the failure predicted one of said protected system elements." While the Examiner cites "(see column 6 lines 38-42)" of the Entenman reference as allegedly disclosing such subject matter, Applicant submits such portion of the cited reference fails to disclose, for example, "...applies to the failure predicted one of said protected system elements." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 15. Therefore, Applicant submits claim 15 is in condition for allowance.

Regarding claim 16, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 16. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein implementing the protection switching operation is initiated after determining that the protection switching priority applies to the failure predicted one of said protected system elements." While the Examiner cites "(see column 6 lines 38-42)" of the Entenman reference as allegedly disclosing such subject matter, Applicant submits such portion of the cited reference fails to disclose, for example, "...is initiated after determining that the protection switching priority applies to the failure predicted one of said protected system elements." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 16. Therefore, Applicant submits claim 16 is in condition for allowance.

Regarding claim 17, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 17. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein determining that the protection switching priority applies to the failure predicted one of said protected system elements includes assessing a protection switching priority parameter for each system element of the collection of failure predicted system elements." While the Examiner cites "(see column 6 lines 38-42)" of the Entenman reference as allegedly disclosing such subject matter, Applicant submits such portion of the cited reference fails to disclose, for example, "...includes assessing a protection switching priority parameter for each system element of the collection of failure predicted system elements." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 17. Therefore, Applicant submits claim 17 is in condition for allowance.

Regarding claim 18, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 18. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein assessing the protection switching parameter includes assessing at least one of a parameter relating to element demerit points, a parameter relating to a rate of change of said element demerit points, a parameter relating to an element demerit point threshold limit, a parameter relating to a number of active connections, a parameter relating to a number of active service subscribers, a parameter designated in a service agreement, a mounted position in a network element, an administrator-assigned priority value, a data bit rate and a rate of change of the data bit rate." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference as allegedly disclosing such subject matter, Applicant submits such portion of the cited

reference fails to disclose, for example, "...assessing the protection switching parameter...." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 18. Therefore, Applicant submits claim 18 is in condition for allowance.

Regarding Claim 19, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 19. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "downloading service information of the failure predicted one of said protected system elements to the protection system element after identifying the failure predicted one of said protected system elements." As Applicant noted with respect to claim 1, from which claim 19 depends, Applicant submits the cited portion of the cited reference fails to teach or suggest "identifying a failure predicted one of a plurality of protected system elements." Thus, Applicant submits claim 19 is in condition for allowance.

Regarding claim 20, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 20. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "determining that a protection switching priority among a collection of failure predicted system elements applies to the failure predicted one of said protected system elements." While the Examiner cites "(see column 6 lines 38-42)" of the Entenman reference as allegedly disclosing such subject matter, Applicant submits such portion of the cited reference fails to disclose, for example, "...applies to the failure predicted one of said protected system elements." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 20. Therefore, Applicant submits claim 20 is in condition for allowance.

Regarding claim 21, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 21. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "wherein determining that the protection switching priority applies to the failure predicted one of said protected system elements includes assessing a protection switching priority parameter for the collection of failure predicted system elements." While the Examiner cites "(see column 6 lines 38-42)" of the Entenman reference as allegedly disclosing such subject matter, Applicant submits such portion of the cited reference fails to disclose, for example, "...includes assessing a protection switching priority parameter for the collection of failure predicted system elements." Thus, Applicant submits the Examiner has not made a *prima facie* showing of

obviousness with respect to claim 21. Therefore, Applicant submits claim 21 is in condition for allowance.

Regarding claim 22, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 22. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "wherein assessing the protection switching parameter includes assessing at least one of a parameter relating to element demerit points, a parameter relating to a rate of change of said element demerit points, a parameter relating to an element demerit point threshold limit, a parameter relating to a number of active connections, a parameter relating to a number of active service subscribers, a parameter designated in a service agreement, a mounted position in a network element, an administrator-assigned priority value, a data bit rate and a rate of change of the data bit rate." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference as allegedly disclosing such subject matter, Applicant submits such portion of the cited reference fails to disclose, for example, "...assessing the protection switching parameter." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 22. Therefore, Applicant submits claim 22 is in condition for allowance.

Regarding Claim 23, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 23. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein the protection system element provides protection switching functionality exclusively for all of said protected system elements." While the Examiner cites "(see column 6 lines 35-40)" of the Harper '398 reference, Applicant notes col. 6, lines 21-25, of the cited reference states, "...at which time the secondary node becomes the primary node, and the primary node is rebooted and subsequently becomes the secondary node." Applicant submits such teaching teaches away from the subject matter of claim 23. Thus, Applicant submits claim 23 is in condition for allowance.

Regarding Claim 27, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 27. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein identifying the failure predicted one of said protected system elements includes determining that a failure prediction parameter associated with the failure predicted one of said protected system elements has exceeded a failure prediction parameter first threshold limit." While the Examiner cites "(see column 9 lines 6-10 and 25-28 of incorporated

by reference Harper '266)," Applicant notes col. 9, lines 25-28, of the Harper '266 reference states "FIG. 7 illustrates, for example, the growth in consumption over time of a typical resource (e.g., non-paged pool bytes), toward an upper limit." Applicant submits the cited portion of the cited reference fails to disclose "...has exceeded a failure prediction parameter first threshold limit." Thus, Applicant submits claim 27 is in condition for allowance.

Regarding Claim 29, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 29. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein the protection system element provides protection switching functionality exclusively for all of said protected system elements." While the Examiner cites "(see column 6 lines 35-37)" of the Harper '398 reference, Applicant submits col. 6, lines 21-25, of the cited reference states, "...at which time the secondary node becomes the primary node, and the primary node is rebooted and subsequently becomes the secondary node." Applicant submits such teaching teaches away from the subject matter of claim 29. Thus, Applicant submits claim 29 is in condition for allowance.

Regarding Claim 30, Applicant has submitted arguments for the allowability of claim 1, from which claim 30 depends. Thus, Applicant submits claim 30 is also in condition for allowance.

Regarding Claim 31, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 31. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...specifying failure prediction criterion for each of said protected system elements." While the Examiner cites "(see column 9 lines 7-14 of incorporated by reference Harper '266)," Applicant submits such portion of such reference fails to disclose or suggest, for example, "...for each of said protected system elements." Thus, Applicant submits claim 31 is in condition for allowance.

Regarding Claim 32, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 32. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein specifying said failure prediction criterion includes specifying a first type of failure prediction criterion for a first portion of said protected system elements and a second type of failure prediction criterion for a second portion of said protected system elements." While the Examiner cites "(see column 9 lines 6-10 of incorporated by reference Harper '266)," Applicant submits the cited portion of the cited reference does not teach or suggest, for,

example, "...a first portion of said protected system elements..." and "...a second portion of said protected system elements." Thus, Applicant submits claim 32 is in condition for allowance.

Regarding Claim 33, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 33. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein specifying said failure prediction criterion includes specifying said failure prediction criterion on a per protected system element basis." While the Examiner cites "(see column 4 lines 10-15 and column 6 lines 32-37 and column 9, lines 7-14 of Harper '266)," Applicant submits the cited portions of the cited reference fail to teach or suggest, for example, "...specifying said failure prediction criterion...." Thus, Applicant submits claim 33 is in condition for allowance.

Regarding Claim 35, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 35. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein identifying the failure predicted one of said protected system elements includes assessing a protection switching operation initiation notification issued via a system administrator user interface." While the Examiner cites, "see column 4 lines 20-22 of incorporated by reference Harper '266)," Applicant submit the cited portion of the cited reference recites "...the system operator can...initiate a graceful planned outage...," which Applicant submits fails to teach or suggest the subject matter of claim 35. Thus, Applicant submits claim 35 is in condition for allowance.

Regarding claim 36, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 36. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "downloading service information of the failure predicted one of said protected system elements to the protection system element after identifying the failure predicted one of said protected system elements." As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "downloading service information of the failure predicted one of said protected system elements to the protection system element after identifying the failure predicted one of said protected system elements." As Applicant noted with respect to claim 1, from which claim 36 indirectly depends, Applicant submits the cited portion of the cited reference fails to teach or suggest "identifying a failure predicted one of a plurality of protected system elements."

Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 36. Therefore, Applicant submits claim 36 is in condition for allowance.

Regarding claim 38, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 38. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "wherein correlating includes determining that an element demerit point level of one of said protected system elements has exceeded a predetermined element demerit point threshold limit." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference, Applicant notes such portion merely recites "U.S. Pat. No. 4,339,657 describes a technique for error logging by integrating error counts over a selected number of operations and comparing the results with a criterion. An exception is logged if the number of errors exceeds the criterion, but the exception log is cleared if the number of errors is less than the criterion." Applicant submits the cited portions of the cited reference fail to teach or suggest applying the "technique for error logging" mentioned in the Downes reference to "...one of said protected system elements." Moreover, Applicant submits the cited portion of the cited reference appears to teach away from such modification, as Applicant submits the "technique for error logging" appears to discard its "exception log" when "the exception log is cleared." Furthermore, Applicant submits the Examiner's assertion that "Downes discloses the concept of predicting a failure..." is unsupported by the cited portion of the cited reference, as Applicant sees no disclosure of such "concept," and, moreover, claim 38 is not directed to a "concept." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 38. Therefore, Applicant submits claim 38 is in condition for allowance.

Regarding claim 40, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 40. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "wherein the element demerit point level corresponds to a quantity of element demerit points accumulated over a designated period of time." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference as allegedly disclosing such subject matter, Applicant submits such portion of the cited reference fails to disclose, for example, "...accumulated over a designated period of time" Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 40. Therefore, Applicant submits claim 40 is in condition for allowance.

Regarding claim 41, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 41. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "wherein correlating includes determining that a rate of change of element demerit points for one of said protected system elements has exceeded a predetermined element demerit point rate of change threshold limit." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference as allegedly disclosing such subject matter, Applicant submits such portion of the cited reference fails to disclose, for example, "...has exceeded a predetermined element demerit point rate of change threshold limit." Furthermore, Applicant submits the Examiner's assertion that "Downes discloses the concept of predicting a failure..." is unsupported by the cited portion of the cited reference, as Applicant sees no disclosure of such "concept," and, moreover, claim 41 is not directed to a "concept." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 41. Therefore, Applicant submits claim 41 is in condition for allowance.

Regarding claim 43, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 43. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "wherein determining that the protection switching priority applies to the failure predicted one of said protected system elements includes assessing at least one of a parameter relating to element demerit points, a parameter relating to a rate of change of said element demerit points, a parameter relating to an element demerit point threshold limit, a parameter relating to a number of active connections, a parameter relating to a number of active service subscribers, a parameter designated in a service agreement, a mounted position in a network element, an administrator-assigned priority value, a data bit rate and a rate of change of the data bit rate." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference as allegedly disclosing such subject matter, Applicant submits such portion of the cited reference fails to disclose, for example, "...determining that the protection switching priority applies to the failure predicted one of said protected system elements...." Furthermore, Applicant submits the Examiner's assertion that "Downes discloses the concept of predicting a failure..." is unsupported by the cited portion of the cited reference, as Applicant sees no disclosure of such "concept," and, moreover, claim 43 is not directed to a "concept." Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 43. Therefore, Applicant submits claim 43 is in condition for allowance.

The Examiner has rejected claims 11, 24-26, 28 and 39 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,978,398 of Harper '398 in view of U.S. Patent No. 4,245,342 of Entenman and US Patent No. 4,769,761 of Downes et al., and further in view of US Patent No. 6,771,440 of Smith.

Regarding Claim 11, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 11. As one example, Applicant submits the cited references fail to teach or suggest "...wherein the predetermined element demerit point threshold limit is associated with a first level of failure probability, lower than an element demerit point threshold limit corresponding to a next higher level of failure probability." While the Examiner cites, "(see column 6 lines 6-20)" of the Smith reference, Applicant submits the Smith reference pertains to adaptive event-based predictive analysis measurements in a hard disk drive. Accordingly, Applicant submits the Smith reference is non-analogous art. Moreover, Applicant notes the Examiner cited the Smith reference on the Form PTO-892 enclosed with the first Office action, where the Examiner characterized claim 11 as "Allowable Subject Matter" and stated claim 11 was "objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." Applicant notes MPEP § 706.04 "Rejection of Previously Allowed Claims" states as follows:

> A claim noted as allowable shall thereafter be rejected only after the proposed rejection has been submitted to the primary examiner for consideration of all the facts and approval of the proposed action.
>
> Great care should be exercised in authorizing such a rejection. See *Ex parte Grier*, 1923 C.D. 27, 309 O.G. 223 (Comm'r Pat. 1923); *Ex parte Hay*, 1909 C.D. 18, 139 O.G. 197 (Comm'r Pat. 1909).

Accordingly, Applicant submits the Examiner's rejection appears to be inconsistent with MPEP § 706.04. Furthermore, Applicant has presented arguments for the allowability of claims 1, from which claim 11 depends. Thus, Applicant submits claim 11 is in condition for allowance.

As to claim 24, Applicant notes the Smith reference pertains to adaptive event-based predictive analysis measurements in a hard disk drive. Accordingly, Applicant submits the Smith reference is non-analogous art. Moreover, Applicant has presented arguments for the allowability of claims 1 and 19, from which claim 24 depends. Thus, Applicant submits claim 24 is also in condition for allowance.

As to claim 25, Applicant notes the Smith reference pertains to adaptive event-based predictive analysis measurements in a hard disk drive. Accordingly, Applicant submits the Smith reference is non-analogous art. Moreover, Applicant has presented arguments for the allowability of claims 1 and 19, from which claim 25 indirectly depends. Thus, Applicant submits claim 25 is also in condition for allowance.

As to claim 26, Applicant notes the Smith reference pertains to adaptive event-based predictive analysis measurements in a hard disk drive. Accordingly, Applicant submits the Smith reference is non-analogous art. Moreover, Applicant has presented arguments for the allowability of claims 1 and 19, from which claim 26 depends. Thus, Applicant submits claim 26 is also in condition for allowance.

As to claim 28, the Examiner states, "Smith discloses a system wherein a first threshold triggers a predictive failure analysis and a second threshold greater than the first threshold signifies a failure (see column 6 lines 6-20)." However, Applicant submits such alleged teaching does not describe "...implementing said protection switching operation...." Thus, Applicant submits claim 28 is in condition for allowance.

Regarding claim 39, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 39. As one example, Applicant submits the cited references fail to teach or suggest "...wherein the predetermined element demerit point threshold limit is associated with a first level of failure probability, lower than an element demerit point threshold limit corresponding to a next higher level of failure probability." While the Examiner cites, "(see column 6 lines 6-20)" of the Smith reference, Applicant submits the Smith reference pertains to adaptive event-based predictive analysis measurements in a hard disk drive. Accordingly, Applicant submits the Smith reference is non-analogous art. Moreover, Applicant notes the Examiner cited the Smith reference on the Form PTO-892 enclosed with the first Office action, where the Examiner characterized claim 39 as "Allowable Subject Matter" and stated claim 39 was "allowable over the prior art of records." Applicant notes MPEP § 706.04 "Rejection of Previously Allowed Claims" states as follows:

> A claim noted as allowable shall thereafter be rejected only after the proposed rejection has been submitted to the primary examiner for consideration of all the facts and approval of the proposed action.

> Great care should be exercised in authorizing such a rejection. See *Ex parte Grier*, 1923 C.D. 27, 309 O.G. 223 (Comm'r Pat. 1923); *Ex parte Hay*, 1909 C.D. 18, 139 O.G. 197 (Comm'r Pat. 1909).

Accordingly, Applicant submits the Examiner's rejection appears to be inconsistent with MPEP § 706.04. Furthermore, Applicant has presented arguments for the allowability of claims 1, from which claim 39 depends. Therefore, Applicant submits claim 39 is in condition for allowance.

The Examiner has rejected claim 53 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,978,398 of Harper '398 in view of U.S. Patent No. 4,245,342 of Entenman and of US Patent No. 6,771,440 of Smith.

Regarding claim 53, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 53. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "identifying the failure predicted one of said protected system elements includes determining that a failure prediction parameter associated with the failure predicted one of said protected system elements has exceeded a failure prediction parameter first threshold limit." While the Examiner cites "(see column 6 lines 6-20)" of the Smith reference as allegedly disclosing "a system wherein a first threshold triggers a predictive failure analysis and a second threshold greater than the first threshold signifies a failure," Applicant submits such alleged teaching, specifically "wherein a first threshold triggers a predictive failure analysis," teaches away from the subject matter of claim 53. Thus, Applicant submits the Examiner has not made a *prima facie* showing of obviousness with respect to claim 53. Therefore, Applicant submits claim 53 is in condition for allowance.

The Examiner has rejected claim 54 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,978,398 of Harper '398 in view of U.S. Patent No. 4,769,761 of Downes et al.

Regarding Claim 54, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 54. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "identifying a failure predicted one of a plurality of protected system elements." While the Examiner cites, "(see column 2 lines 19-23)" and "(see column 4 lines 23-27)" of the Harper '398 reference, Applicant submits the cited portions of the cited reference recite "In a third aspect, a method (and system) of maintaining performance of a primary node in a computer system, includes monitoring the primary node of the computer system, determining whether the primary node is failing or about to fail, and migrating the state of the primary node to..." and "Indeed, in a cluster system having more than two nodes, the secondary node 101B may not know which primary node 101A is going to fail until the failure is predicted, so it cannot have the primary node's

application already running." As another example, Applicant submits such portion of such reference fails to teach or suggest, for example, "a plurality of protected system elements." Rather, Applicant submits col. 2, lines 19-23, of the cited reference, as cited by the Examiner, appears to describe merely "...monitoring the primary node..., determining whether the primary node is failing or is about to fail...." Thus, Applicant submits claim 54 is in condition for allowance.

Regarding claim 54, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 54. In the Examiner's Response to Arguments, the Examiner states as follows:

> In response to teaching away, examiner is uncertain how the 'technique for error logging' appears to discard its 'exception log' when 'the exception log is cleared' causes the reference to teach away from such modification. Harper is concerned with detecting degradation of performance of a computer system (see column 1 lines 60-61), and a person of ordinary skill in the art could have been motivated to combine the teachings because monitoring the error count over a selected number of operations, as per teachings of Downes (see column 1 lines 60-65), constitutes as suitable known means to detect degradation of performance of a computer system. Argument is moot. Examiner maintains his rejection.

Applicant submits Downes' teaching as to clearing the "exception log" appears to delete the "error counts." Applicant submits, while the Examiner alleges "Downes discloses the concept of predicting a failure upon determination the error count over a selected number of operations is above a criterion or threshold (see column 1 lines 60-65)," deleting the "error counts" upon which Downes apparently depends would prevent "determining the rate of change of element demerit points..." even if the teachings of the cited portion of the Downes reference did disclose the subject matter alleged by the Examiner, which Applicant disputes.

As Applicant previously stated, as one example, Applicant submits the cited portions of the cited references fail to teach or suggest "identifying a failure predicted one of a plurality of protected system elements." While the Examiner cites, "(see column 2 lines 19-23)" and "(see column 4 lines 23-27)" of the Harper '398 reference, Applicant submits the cited portions of the cited reference recite "In a third aspect, a method (and system) of maintaining performance of a primary node in a computer system, includes monitoring the primary node of the computer system, determining whether the primary node is failing or about to fail, and migrating the state of the primary node to..." and "Indeed, in a cluster system having more than two nodes, the secondary node 101B may not know which primary node 101A is going to fail until the failure is predicted, so it cannot have the primary node's application already running." As another example, Applicant submits such portion of such reference
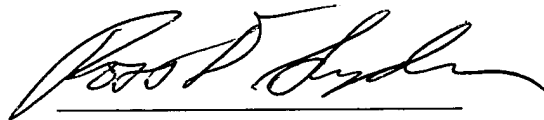
fails to teach or suggest, for example, "a plurality of protected system elements." Rather, Applicant submits col. 2, lines 19-23, of the cited reference, as cited by the Examiner, appears to describe merely "...monitoring the primary node..., determining whether the primary node is failing or is about to fail...." Thus, Applicant submits claim 54 is in condition for allowance.

The Examiner states claim 55 is allowable if rewritten or amended to overcome the claim objection set forth in the Office action dated April 15, 2009. Applicant has presented arguments for the allowability of claim 55. Thus, Applicant submits claim 55 is in condition for allowance.

In conclusion, Applicant has overcome all of the Office's rejections, and early notice of allowance to this effect is earnestly solicited. If, for any reason, the Office is unable to allow the Application on the next Office Action, and believes a telephone interview would be helpful, the Examiner is respectfully requested to contact the undersigned attorney.

Respectfully submitted,

10/15/2009
_____
Date

_____
Ross D. Snyder, Reg. No. 37,730
Attorney for Applicant(s)
Ross D. Snyder & Associates, Inc.
PO Box 164075
Austin, Texas 78716-4075
(512) 347-9223 (phone)
(512) 347-9224 (fax)